Personalizing the MOOC: Insights from Experts Around Planet Earth
Curtis J. Bonk, Indiana University
cjbonk@Indiana.edu
KAEIM Conference, Seoul, Korea
May 28, 2016

Part I. Current Trends and Recent Cycles

Audience Poll #1: Do you know what this year is?

January 15, 2016
Wikipedia is 15!
Scott McLemee, Inside Higher Ed

April 4, 2016
MIT OpenCourseWare is 15!
http://ocw.mit.edu/about/15-years/

Milestones in Educational Technology
(All 7 year cycles)

- 2008: First MOOC Offered.
**Time to Scratch the 7 Year Itch?**

**Audience Poll #1:**
Who in here has used OpenCourseware?

**October 29, 2015**

Encouraging Faculty to Use Open-Source Content

<table>
<thead>
<tr>
<th>Encouraging Faculty to Use Open-Source Content</th>
<th>Fall 2013</th>
<th>Fall 2015</th>
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<tbody>
<tr>
<td>Community colleges</td>
<td>40%</td>
<td>40%</td>
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<tr>
<td>Private 2-year colleges</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Public 2-year colleges</td>
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<td>40%</td>
</tr>
<tr>
<td>Private universities</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Public universities</td>
<td>10%</td>
<td>10%</td>
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</table>

**Audience Poll #2:**
Who in here has taken a MOOC?

**October 19, 2015**
MOOCs Are Still Rising, at Least in Numbers, Ellen Wexler, Chronicle of Higher Education

Growth of MOOCs

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of MOOCs</th>
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</thead>
<tbody>
<tr>
<td>Nov. 14</td>
<td>1,500</td>
</tr>
<tr>
<td>Dec. 14</td>
<td>2,000</td>
</tr>
<tr>
<td>Jan. 15</td>
<td>2,500</td>
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<tr>
<td>Feb. 15</td>
<td>3,000</td>
</tr>
<tr>
<td>Mar. 15</td>
<td>3,500</td>
</tr>
</tbody>
</table>

**Audience Poll #3:**
Who in here has taught a MOOC?

**October 19, 2015**
MOOCs Are Still Rising, at Least in Numbers, Ellen Wexler, Chronicle of Higher Education

Growth of MOOCs

<table>
<thead>
<tr>
<th>Month</th>
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</tr>
</tbody>
</table>
October 19, 2015

MOOCs Are Still Rising, at Least in Numbers,
Ellen Wexler, Chronicle of Higher Education

May 19, 2016

MOOC lists:
Class Central, the MOOC list
https://www.mooc-list.com/
https://www.class-central.com/

May 19, 2016

Topica Recognizes MOOCs
(Topica EdTech Group...in Southeast Asia)
https://topica.asia/

Things are heating up!
http://routledge-nx.com/books/details/9781138807419/

Part II.
MOOCs and Open Education
Around the World
http://routledge-nx.com/books/details/9781138807419/

Foreword #1: The Role of MOOCs in the Future of Education?
George Siemens, Executive Director of the Learning Innovation and Networked Knowledge Research Lab, University of Texas Arlington

http://routledge-nx.com/books/details/9781138807419/
Foreword #2: Open(ing up) Education for All, Boosted by MOOCs?
Fred Mulder, UNESCO Chair in Open Educational Resources at the Open University of the Netherlands

Chapter 1: The MOOC Misstep and the Open Education Infrastructure
David Wiley, Co-founder and Chief Academic Officer, Lumen Learning

The Open Education Infrastructure
1. Open Credentials
2. Open Assessments
3. Open Educational Resources
4. Open Competencies

Chapter 2: The Single Canon: MOOCs and Academic Colonization
Karen Head, PhD
The Georgia Institute of Technology

“If MOOC proponents truly seek to offer the best educational opportunities to the world, they will have to open these platforms to a wide variety of institutions and instructors.”

Chapter 3: MOOCs and Open Education in Japan: A Case of the Open University of Japan
Kumiko Aoki, Ph.D., The Open University of Japan

“It is hoped that MOOCs will play a significant role for stakeholders in Japanese higher education in the near future.”

Chapter 4: MOOCs, MERLOT, and Open Educational Services
Gerard L. Hanley, Ph.D.
MERLOT Executive Director
Assistant Vice Chancellor, Academic Technology Services
California State University, Office of the Chancellor

Figure 1. MOOCs as a Recent Evolution of OER

Chapter 5: Enabling Open Education: A Feasibility Protocol for Australian Higher Education
Dr Carina Bossu, University of Tasmania, Australia
Mr David Bull, University of Southern Queensland, Australia
Professor Mark Brown, Dublin City University, Ireland

Figure 5.1. Feasibility Protocol

Feasibility Protocol
Chapter 16: Collaborative Design and Development of MOOCs for Teacher PD
Bernard Robin and Sara McNeil, Univ. of Houston

Chapter 18: Changing the Tune: MOOCs for Human Development? A Case Study
Balaji Venkatataraman and Asha Kanwar, COL

Chapter 19: Harnessing the Power of Open Learning to Share Global Prosperity and Eradicate Poverty
Sheila Jagannathan, World Bank, Washington DC

Chapter 20: The Glocalization of MOOCs in Southeast Asia
Zoraini Wati Abas, Ed.D.
Figure 2. Eight of thirteen MOOCs offered by Taylor’s University

Chapter 19: Harnessing the Power of Open Learning to Share Global Prosperity and Eradicate Poverty
Sheila Jagannathan, World Bank, Washington DC
MOOCs on Climate Change (e.g., impacts of climate change on farmland) and Risk and Opportunity (reducing the risk of childhood mortality)

Chapter 22: OER and MOOCs in Africa: The AVU Experience
Griff Richards and Bakary Diallo, African Virtual University, Nairobi, Kenya
It is estimated that only 6% of Africans can access post-secondary education. The development goal is set at 12% even though North America and Europe are somewhat around 45%. 
Chapter 23: Open Learning in the Corporate Setting
Elliot Masie, The Learning CONSORTIUM @ The MASIE Center

"Open" is an interesting and disruptive word to use about a corporate setting. Yet, Open Learning is one of the most provocative and rapidly changing elements of how corporate learning is being harvested, delivered, and packaged.

Chapter 24: ALISON: A New World of Free Certified Learning
Mike Feerick, CEO & Founder, ALISON

Chapter 28: MOOCs 2030: A Future for Massive Online Learning
Rebecca Ferguson, Mike Sharples (The Open University, UK), Russell Beale (University of Birmingham)

Part III. Ideas for Cultural Sensitivity

Chapter 2: USA/Georgia Tech:
Karen Head

- Be careful with: hand gestures (e.g., finger pointing—use at least two fingers), body movements, English dominance, political issues.
- Jokes and humor can easily be misinterpreted.
- Be aware of shifting political climates impacting resource access such as YouTube in China.
- Many cultures do not have a linear approach (e.g., from A to B) to communication.
- Using visual rhetoric (e.g., visual images) to communicate can be a minefield of problems.

January 27, 2014
Various Geo-Political Issues
Coursera Support Center, Why is my country blocked?
Online education platform Coursera blocks students in Syria and Iran, Wamba, Nina Curley
**Chapter 3: Japan/The Open U**

Kumiko Aiko

- Make subtitles available in multiple languages based on intended audiences.
- Avoid references to current events that may only be shared by a small subgroup.

**Chapter 5: Australia**

Carina Bossu

To ensure inclusiveness (including cultural, ethical, and religious), one should openly license all educational materials developed for MOOCs, so as to guarantee the permissions and freedoms required for translation, adaptation, re-use, redistribution, and repackaging.

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**September 16, 2013**

*Courses from Open Content*

Rwandan Degree Program Aims for a 'University in a Box', Chronicle of Higher Education, Megan O'Neil


Students attend an orientation session at Kepler, a new hybrid program in Kigali, Rwanda, which will use MOOCs and classroom time to help students earn competency-based associate degrees.

**Chap. 6: South Africa**

Laura Czerniewicz

- The single most important requirement is that MOOCs and MOOC resources be made available under Creative Commons licenses or other open licenses which allow for re-use and adaptation. It is essential a broadcast model be employed.
- The agency for and ownership of local resources need to be in the hands of those who best understand local conditions, and therefore they need to be able to create and adapt as they see fit.

**Chapter 8: New Zealand and Ireland**

Mark Brown

- Create MOOCs on indigenous cultures and unique languages other than English (e.g., Irish).
May 31, 2014
Localization of Content
ocMOOCs and hMOOCs
Revolutionizing online education
Professor creates courses tailored to cultural differences,
Korea JoongAng Daily, KIM BONG-MOON (bongmoon@joongang.co.kr)

Professor Auh Yoon-il of Kyung Hee Cyber University explains the upcoming
Kyung Hee MOOC 2.0 in an interview with the Korea JoongAng Daily at Kyung
Hee University on Wednesday. (“one culture” or ocMOOCs and hMOOCs)

Chapter 9: Scotland
U of Edinburgh
Amy Woodgate
– Intermittent Internet access on one’s mobile phone will not help to stream HD videos.
– Simple course designs (e.g., talking heads with minimal hand gestures) helps to make content more available for international audiences. More engaging content is more difficult to convert.

Mobile MOOCs
(e.g., mobile courses on smartphone)

Chapter 10: India and Canada/COL
Sanjaya Mishra
– Be culturally sensitive to music and pictures while designing content for global audience.
– Consider technology used to develop the content (does it assist reuse and remixing?).
– Instead of focusing too much on the cultural sensitivity of MOOCs and raising costs, try to allow for reuse and remixing of content. Use open source technologies and content.

Chapter 12: Netherlands/Open U
Fred Mulder and Darco Jansen
To be mindful of:
• Different levels of digital literacy skills
• Local resources by locals
• Legal differences and barriers
• Gender, age, and disability issues
• Device-specific pedagogy and interface

May 27, 2015
MOOC Participant Study Strategies
The Invisible Learners Taking MOOCs,
George Veletsianos, Inside Higher Ed
https://www.insidehighered.com/blogs/higher-ed-beta/invisible-learners-taking-moocs

Rajeev Bajpai, an airline pilot based in Mumbai, took an online computer-science course to gain programming skills.
Chapter 14: USA/Stanford
Paul Kim and Charlie Chung

- Encourage students to download lecture videos and translate them to other languages and perhaps add captions and make available in their local cloud services.
- Encourage students to create low bandwidth versions of videos for those in low bandwidth areas.
- Encourage students to translate videos and add nuances and words understandable in local languages.
- Encourage students to meet locally in teams to share materials and take care of “sensitive matters.”

August 1, 2014
Can You Really Teach a MOOC in a Refugee Camp?
Steve Kolowich, Chronicle of Higher Education

Two men living in Dadaab, a refugee camp in Kenya, would watch lecture videos and take online quizzes at a nearby United Nations compound. (InZone)

Chapter 15: USA/U Michigan
Chuck Severance

- Avoid troublesome metaphors and examples (e.g., the baseball World Series in the USA).
- Never show lecturer’s face (use audio only)—allows for complete overdubbing in the native language and avoid hand gesture problems.
- Make slides as word free as possible—where possible use symbols
- “Limit” to audio and “No” video OR keep the video “simple”

April 20, 2015
Case Studies
250 MOOCs and Counting: One Man’s Educational Journey, Chronicle of Higher Education
http://chronicle.com/article/250-MOOCsCounting-One/229397/

If the MOOC movement has faded, nobody told Jima Ngei. Mr. Ngei, who lives in Port Harcourt, Nigeria, has completed and passed 250.

Jima Ngei: “I had this unrelenting fear that this miracle of free access might evaporate soon.”

Chapter 19: DC/World Bank Institute
Sheila Jagannathan

- "Widen" and "increase" representations from more diverse groups and stakeholders (gender, non western, public and private, grass roots, etc.).
- Make the contents more culturally sensitive/relevant.

Chapter 20
Indonesia and Malaysia
Zoraini Wati Abas

- Do not expect Asian audience to quickly voice their opinions
- Treat Asian audience as an equal
- Avoid issues related to religion and politics.
- Minimize distractions and negative feelings (e.g., do not show visuals or give examples of prohibited types of foods or animals)
March 4, 2016
MOOCs: vital tools in education of the future – or over-hyped online fad? (embedded video: 8:01)
Euro News, Sarah Chappell
http://www.euronews.com/2016/03/04/moocs-vital-tools-that-are-shaping-the-future-of-education-or-over-hyped-online-fad/

Chapter 21:
U of Philippines Open U
Melinda Bandalaria
– Strictly avoid references to religion.
– Use acceptable dress code.
– Even when English is the primary or secondary language of the country, consider making MOOC content available in the major dialects of the country.

April 21, 2014
Internet Café in Manila
The Revolution Is Not Being MOOC-ized, Students are educated, employed, and male.
Gayle Christensen and Brandon Alcorn, UPenn, New Scientist
http://www.slate.com/articles/health_and_science/new_scientist/2014/03/mooc_survey_students_of_free_online_courses_are_educated_employed_and_male.html

Chapter 27:
Canada
Helene Fournier and Rita Hop
• "Personalize" the learning experience to offset the massiveness.
• Need to think hard about how cultural differences might be expressed and accepted in the MOOC platform.
• The road ahead hinges on personalizing learning experiences; the connectivist approach (i.e., cMOOCs) is which participants are in the driver’s seat.

April 28, 2016
Communities
Shindig, Video Chat Tool
Future Trends Forum (with Bryan Alexander)
https://bryanalexander.org/

March 1, 2016
Zoom
Tarleton State University, Texas
Dr. Credence Baker
Chapter 28: UK/FutureLearn
Rebecca Ferguson and Mike Sharples

- Access. In many countries (e.g., in Africa, but also areas of Asia) mobile is the main means of access, so the courses need to be developed for a mobile-first experience, including pedagogy as well as interface.
- Provide transcripts of videos, preferably in multiple languages and multi-language subtitles.
- There are deep-seated cultural differences related to: the value of expert vs learner-originated knowledge; deference to experts; willingness to engage in discussion and critique.

January 20, 2016
Why the Future Is Bright for the World’s Poorest Farmers, Gates Notes, the blog of Bill Gates

Foreword: Canada/USA
George Siemens

- MOOCs are adopting CMUs OLI project (adaptive learning in stats) (e.g., Candace Thille at Stanford).
- Smart Sparrow (adaptive learning company connected to ASU) has started running personalization in MOOCs. One personalized/adaptive MOOC with Australian univ.
- Carolyn Rose at CMU recently ran a "Super Heroes" MOOC together with Smithsonian that used personalization approaches through "intelligent agents" to foster dialogue and collaboration.

Part IV.
Personalization of MOOCs

March 9, 2016
iLearn@america MOOC: The Rise of Superheroes and their Impact on Pop Culture

October 1, 2014
Acrobatiq

http://acrobatiq.com/
Chapter 18: Canada/COL
Balaji Venkataraman

- In the Mooc on mobiles for development the course team received requests from two groups of learners in Sierra Leone and Zambia for the course materials on DVD.
- AgMoocs initiative (http://www.agmoocs.in/) uses MooKIT platform designed for access in low bandwidth conditions. It includes a functionality for a learner to hear the voice track on a basic mobile phone.

May 20, 2016
agMOOCs (India)
http://www.agmoocs.in/

May 20, 2016
agMOOCs (India)
http://www.agmoocs.in/

September 15, 2015
GROOCs are MOOCs for Social Impact
Social Learning for Social Impact, edX
Join the world’s first GROOC – a MOOC for groups – to collaborate with others globally and create social change.
https://www.youtube.com/watch?v=WNg5LFAMdI
https://www.youtube.com/watch?v=Kq2t065F8JY

Chapter 18: Canada/COL
Balaji Venkataraman

In the Pacific COL supported the U of South Pacific with a specially constructed MOOKIT platform. Social media was integrated with it. Any interested learner can add his or her SM profile to the profile in the course. This will enable a learner to follow the discussions on the course forum on real time using just the smart phone. This bandwidth is cheaper in most Pacific island countries than bandwidth availed for laptops. This facility greatly contributed to increased course participation often overwhelming the team of instructors.
May 19, 2016
Facebook Schools MOOCs on Engagement
Jason Schmitt, EdSurge

Chapter 18:
DOCC/USA
Radhika Gajjala

Doing a "Collaborative" course requires that we engage the context - not just talk to it.... We start by dialogue and engagement with the students - the sensitivity would emerge through interaction and skype conversations and discussion and debate.

Chapter 18:
DOCC/USA
Liz Losh

The Selfie Course...
MOOCs often tend to misestimate the importance of situated experience in approaching learning as a meaning-making process.
Snapchat pedagogy, the ways that MOOCs overlook the importance of the mobile phone as a vehicle for connecting students -- who are individually situated in time, space, status, etc. -- in distributed learning networks.

Chapter 19:
DC/World Bank Institute
Sheila Jagannathan

• We try to do badging etc. to give motivation and personal incentives such as champion or expert.
• We try to customize the discussion forums with regional and very level forums, topics and moderators.
• Google hangouts are also used to customize and personalize at country or institutional levels.

September 2014
The Selfie Course
http://www.selfieresearchers.com/the-selfie-course/

Research Topic #23.
Learning for Enjoyment vs. Credentials
March 3, 2016
'Trump U.' Draws Unflattering Spotlight to the Candidate as Fraud Cases Move Forward
Chronicle of Higher Education, Corrine Ruff
http://chronicle.com/article/Trump-U-Draws/235573?cid=trend_right_article

August 5, 2015
Acceptability of Nanodegrees and Microcredentials
How Nanodegrees Are Disrupting Higher Education
John Waters, Campus Technology
http://campustechnology.com/articles/2015/08/05/how-nanodegrees-are-disrupting-higher-education.aspx

January 13, 2016
Degree gets you a tech job — or your money back, Marco della Cava, USA Today

Chapter 21: Philippines Open U
Melinda Bandalaria
• ...one feature that we have integrated into our MOOCs which I think is one effort to personalize learning is the "Multiple Paths to Learning" or the "Learning on the Go". Through this feature, the learner can choose whether to learn through the video lessons, text lessons or podcast.
• In terms of gadgets to use, of course, we made sure that the courses are accessible whatever device especially mobile devices, the learner has access to.

May 19, 2016
From MOOC to bootcamp to MIT
MIT News
Chapter 22: 
Canada/Africa
Griff Richards

"I think a concept like personalization is laudable, but I’d like to see where it sits in the list of things to do to improve MOOCs. For example if we look down Hattie’s list of useful interventions, would personalization give us the biggest learning bang for the buck of development? Or would we get there through some simpler intervention like simply making the courses more self-paced."

Chapter 25: 
USA/Illinois
Vickie Cook

- Personal notes within the MOOC from either other students or the instructor that the MOOC takes on a personalized emphasis...communications that do not use my name, or are generic to be reused—feel quite cold and impersonal.
- Theory of “heutagogy” – basically learning that is self-determined and available in a mobile interface, I think it is important that personalization also create the desire to return to the MOOC for more.

Chapter 25: 
USA/Illinois
Ray Schroeder

• Most obvious way to personalize is to include group projects, allowing students to self-select into interest areas to conduct collaborative projects that are relevant to the MOOC topic
• One of the easiest and most effective ways is to build self-reflection into each module of a MOOC.
• Motivated self-determined learners (such as many MOOCers are) do naturally adapt, build upon and scaffold MOOCs to meet their personal learning needs and desires.

Part V. Ten “10” MOOC Instructor Guidelines

<table>
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<th>Type of MOOC</th>
<th>eMOOC</th>
<th>xMOOC</th>
<th>pMOOC</th>
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<tr>
<td>Learner Role</td>
<td>Active</td>
<td>Passive</td>
<td>Active</td>
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<td>Instructor Role</td>
<td>Co-learner</td>
<td>Sage on video stage</td>
<td>Guide on the side</td>
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<td>Behaviorism</td>
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<td>Knowledge integration</td>
<td>Knowledge duplication</td>
<td>Knowledge production</td>
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<td>Metaphor</td>
<td>“We link movies”</td>
<td>“We watch movies”</td>
<td>“We make movies”</td>
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<td>Development Approach</td>
<td>Learning design</td>
<td>Instructional design</td>
<td>Educational design research</td>
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<td>Self Assessment</td>
<td>External and/or Peer Assessment</td>
<td>Self and/or Client Assessment</td>
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<td>Seat of the pants funding</td>
<td>Large external funding</td>
<td>Moderate client provided funding</td>
</tr>
</tbody>
</table>

Figure 1. Differences among three types of MOOCs (Reaves & Hoelberg, 2014).

MOOC Instructor Guide #1.
Plan and Prepare for the Experience

Plan! Prepare! Practice!

MOOC Guide #2.
Build in Feedback for Each Experience (etc., Peer, Machine, Volunteer, and Self-Assessment)

MOOC Guide #3.
Create Interactivities (e.g., use Polling Questions)

MOOC Guide #4.
Provide Variation and Choice

MOOC Guide #5.
Combine Sync and Async Instruction (e.g., David Merrill and Charlie Reigeluth)

MOOC Guide #6.
Design Responsive and Interactive Learning Communities
MOOC Guide #7.
Offer Weekly Recaps and Updates

Let's Recap

MOOC Guide #8.
Personalize the Activity or Experience Where Possible!

MOOC Guide #9.
Engage in Resource Sharing

MOOC Guide #10.
Be Willing to Change Midstream.

Any Comments or Questions?
Slides at: TrainingShare.com
Papers: PublicationShare.com
Free Book: http://tec-variety.com/
MOOCsBook: http://moocsbook.com/